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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,373	02/17/2004	Marc Schaeckens	133348	7897
6147	7590	12/28/2005	EXAMINER	
GENERAL ELECTRIC COMPANY GLOBAL RESEARCH PATENT DOCKET RM. BLDG. K1-4A59 NISKAYUNA, NY 12309			KRUER, KEVIN R	
			ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/779,373

Applicant(s)

SCHAEPKENS ET AL.

Examiner

Kevin R. Krueer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 10-26 is/are pending in the application.  
4a) Of the above claim(s) 16-26 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,3-8 and 10-15 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 16-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/05/2006.

### ***Drawings***

2. Amended drawings were received on October 3, 2005. These drawings are accepted and are sufficient for overcoming the objections noted in the Office Action of 7/5/2005.

### ***Claim Rejections - 35 USC § 102(b)***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 3-5, 7, 8, and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Terasaki et al (US 6,432,516) for reasons of record.

Terasaki teaches a moisture proof film composed of a transparent multi-layer film having a layer structure that thin metal oxides are respectively arranged directly or through adhesive layer on both sides of a hydroscopic resin layer (abstract). The metal oxide layer may comprise oxides of Al, Zn, Sn, In, and Ti (col 8, lines 33+). Transparent resin layers may be applied to both sides of the composite film (col 6, lines 50+). In such an embodiment, the transparent layers are understood to read on the claimed "first" and "second" polymeric substrates. The laminate may further comprise a plurality of thin oxide layers and polymeric layers in alternating sublayers (col 7, lines

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58+), wherein the adhesive layers and the hygroscopic layer are understood to read on the claimed "polymeric material." Said alternating layers are herein understood to read on the "diffusion inhibiting barriers comprising a material, the composition of which varies across a thickness thereof." The hygroscopic layer may comprise EVOH and the adhesive layers may comprise polyethylene, polyester or polyamide (col 10, lines 8+). Said moisture proof film may be applied over an EL device (col 14, lines 37+), herein relied upon to read on the claimed electronic device of claim 8 and the electrically conducting material of claim 7. Said EL device is a luminescent layer held between a pair of electrodes (col 1, lines 22+).

5. Claims 1, 3-8, and 10-14 are rejected under 35 USC 102(b) as being anticipated by Graff et al (US 6,492,026) for reasons of record.

Graff teaches a high temperature substrate comprising at least one barrier stack adjacent to the polymer substrate (abstract). The substrate may be coated with additional layers such as scratch resistant layers (col 2, lines 64+) or electrically conductive layers (col 5, lines 1+). There is optionally a second substrate applied to the barrier stack on the side opposite the first substrate layer (col 4, lines 57+). The barrier stack comprises barrier layers and polymer layers (col 3, lines 57+). The barrier layers may comprise metal oxides, oxynitrides, nitrides, and the like (col 6, lines 1+). Said alternating layers of polymers and barrier layers are herein understood to read on the "diffusion inhibiting barriers comprising a material, the composition of which varies across a thickness thereof." The polymer layers are acrylate polymers (claim 10). Said

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barrier may be utilized with LEDS, LEPs, ED, LCDs and the like (col 2, lines 3+). When utilized, said devices are disposed between a pair of electrodes.

***Claim Rejections - 35 USC § 102(a)***

6. Claims 1, 3-5, 7, 8, and 10-15 are rejected under 35 USC 102(a) as being anticipated by Silvernail (US 6,576,351) for reasons of record.

Silvernail teaches an organic photoelectronic device structure and a method of making the same. The structure comprises a first barrier resin comprising a first composite stack and a second composite layer stack attached to the first composite layer stack (abstract). The composite layer stack comprises a first polymer substrate layer, at least one first planarizing layer and at least one first high-density layer, while the second composite layer stack similarly comprises a second polymer substrate layer, at least one second planarizing layer and at least one second high-density layer (abstract). Preferably, the stacks will comprise two or more planarizing layers and two or more high density layers (col 2, lines 41+). The planarizing layers comprise fluorinated polymers, polyacrylates, and the like. The high density layers comprise metal oxides, nitrides, carbides, and oxynitrides. Said multi-layer barrier stacks are herein understood to read on the "diffusion inhibiting barriers comprising a material, the composition of which varies across a thickness thereof" since the compositional makeup of the stack varies across its thickness. The substrate layers comprise polyolefin, polyimide, polyethersulphone, and polyester (col 2, lines 53+). The substrates are arranged such that the stacks are between said substrates (col 2, lines 26+).

The barrier region (comprising first and second composite layer stacks) may be applied to an organic optoelectronic device selected from the group consisting of organic light emitting diode, an organic electrochromic display, an organic photovoltaic device, and an organic thin film transistor (col 6, lines 61+). When utilized, said devices are disposed between a pair of electrodes.

***Claim Rejections - 35 USC § 102(e)***

7. Claims 1, 3, 4, 6-8, 10, 11, 13, and 14 are rejected under 35 USC 102(e) as being anticipated by Chung et al (US 6,836,070) for reasons of record.

Chung teaches an electro-luminescent display with a substrate comprising an anode, and a cathode, and a barrier layer protective layer. A transparent sealing structure is glued to the top of the substrate wherein the transparent sealing structure has an adhesive layer glued to the protection layer, a plurality of organic resin layers formed on the adhesion layer, a plurality of inorganic barrier layers disposed between the organic resin layers, a flexible polymer film formed on the organic resin layer, and a hard coat formed on the flexible polymer layer (abstract). Herein the flexible polymer layer and the substrate are understood to read on the claimed "first" and "second" polymeric substrate layers. The organic layers are herein understood to read on the claimed organic polymer materials. The inorganic barrier layers are herein understood to read on the claimed inorganic material and may comprise metal oxides or nitrides (col 3, lines 39+). Said stack of barrier layers is herein understood to read on the "diffusion inhibiting barrier comprising a material, the composition of which varies across a

thickness thereof" since the compositional makeup of the stack varies across its thickness.

### ***Response to Arguments***

Applicant's arguments filed September 29, 2005 have been fully considered but they are not persuasive.

Applicant argues said references fails to disclose or suggest that the diffusion-inhibiting barrier comprises a material, the composition of which varies across a thickness thereof. The examiner respectfully disagrees. The examiner notes each reference teaches a barrier inhibiting barrier that comprises a barrier stack of a plurality of sublayers. Since the composition of the sublayers is not identical to one another, the examiner maintains the position that said references teach a diffusion-inhibiting barrier wherein the composition varies across its thickness.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K R Kruer' with a horizontal line at the end.

Kevin R. Kruer  
Patent Examiner-Art Unit 1773